

**Request to Archive
With The National Centers for Environmental Information
For Soil Moisture Products System (SMOPS)
Provided by OSPO**

2016-06-16

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

1. Who is the primary point of contact for this request?

limin zhao

OSDPD

Precipitation Products Area Lead

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Email and/or Phone during the normal business hours (8 am ~ 4:30pm)

2. Name the organization or group responsible for creating the dataset.

NOAA/NESDIS/OSPO

3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.

This data collection includes NOAA daily blended soil moisture products over global land. The data file contains a number of data layers, including AMSR-2 soil moisture, SMOS soil moisture, ASCAT soil moisture, Windsat soil moisture, and the blended soil moisture, and also quality assessments and sampling time for each of these soil moisture retrievals. The number of sensors used varies as new satellite comes on board, and old satellite retires.

4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)

From 2016-06-01

Ongoing as continuous updates to the data record

5. Edition or version number(s) of the dataset:

N/A

6. Approximate date when the dataset was or will be released to the public:

2011-08-30

7. Who are the expected users of the archived data? How will the archived data be used?

NWS/NCEP/EMC, USDA, DoD, GCOS program and researchers.

Soil moisture related climate or weather forecast research projects under GCOS may need historical soil moisture data sets.

8. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?

No

9. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?

N/A

10. List the input datasets and ancillary information used to produce the data.

Windsat Brightness Temperature, Metop-A&-B ASCAT L2 soil moisture retrieval, SMOS brightness temperature, SOMS L2 soil moisture retrieval, AMSR-2 soil moisture retrieval, GPM brightness Temperature, SMAP soil moisture, Metop NDVI

11. List web pages and other links that provide information on the data.

<http://www.ospo.noaa.gov/Products/land/smops/index.html>

12. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.

1. User Manual

13. Indicate the data file format(s).

1. netCDF-4

14. Are the data files compressed?

No

15. Provide details on how the files are named and how they are organized (e.g., file_name_pattern_YYYYMM.tar in monthly aggregations).

The SMOPS daily file follows the name convention as: NPR_SMOPS_CMAP_Dyyyymmdd.nc4, where

NPR: NESDIS Production

SMOPS: product system short name

CMAP: Cylindrical map projection

Dyyyymmdd: time stamp using year, month, day

nc4: netCDF4

16. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?

<ftp://satepsanone.nesdis.noaa.gov/product/smops/TestData/>

17. What is the total data volume to be submitted?

Continuous Data: data volume rate for a continuous data production.

Total Data Volume Rate: 2MB per Day

Data File Frequency: 1 per Day

Data Production Start: 2016-06-01

18. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.

Updates are expected when new satellite data are merged into the blended products, such as, GPM, SMAP. However, changes will be only involved information content, no change is expected to the filename.

19. Describe the server that will connect to the ingest server at NCEI for submitting the data.

Physical Location: NSOF, Maryland
System Name: ESPC Data Distribution Server
System Owner: OSPO
Additional Information: DDS will be replaced by PDA in future

20. What are the possible methods for submitting the data to NCEI? Select all that apply.

1. FTP PULL
2. FTP PUSH
3. SFTP PUSH

21. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.

1. User interface to order and stage data for download
2. Direct download links

22. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?

No known constraints apply to the data.

23. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.

Soil moisture has been listed as an Essential Climate Variable (ECV) by Global Climate Observing System (GCOS). Having a long term soil moisture data archive will directly contribute to GCOS program. Soil moisture related climate or weather forecast research projects may need historical soil moisture data sets. The archive would serve these projects directly.

OSPO has received lots of user requests for archived soil moisture data since the product was made into operation. Currently, STAR archives some of data, which are the main historical data resource for the users.

24. Are the data archived at another facility or are there plans to do so? Please explain.

No

25. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?

This is a re-active request. I worked with Phil Jones in filling in a archive request form back to 2010, but the process hung. The products went to operational back in 2011, and there have been no data archived yet.

26. Do you have a data management plan for your data?

No

27. Have funds been allocated to archive the data at NCEI?

FY17 Polar PSDI funds is proposed.

28. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.

NESDIS PSDI project - Polar_Global_Soil_Moisture_Product_System

29. Is there a desired deadline for NCEI to archive and provide access to the data?

Archive by: 2016-07-29

Accessible by: 2016-07-29

30. Add any other pertinent information for this request.

None